Appl. No. 10/603,288
Paper dated <u>January 25, 2005</u>
Reply to Office Action dated <u>October 1, 2004</u>

Amendments to the Specification:

Please replace the paragraph beginning at page 6, line 21, with the following rewritten paragraph:

-- The arrangements made consist preferably of thicker parts in the form of serrations flutes, which it makes it easier to produce molds for manufacturing the lenses. –

Please replace the paragraph beginning at page 8, line 17, with the following rewritten paragraph:

-- at least one of the arrangements is produced in the form of a serration-flute -- Please replace the paragraph beginning at page 11, line 16, with the following rewritten paragraph:

-- In a preferred example embodiment of the invention, illustrated in FIG. 4, it is proposed to carry out the modifications to the continuity of the exit surface of the lens 105 in the form of protuberant serrations flutes 400 disposed in various areas of the side surfaces 306 and 307 of the exit face 111 in order to obtain a new projection lens 401. These serrations flutes are produced as follows: each of the serrations flutes 400 produced is intended to illuminate a particular overhead light. There is therefore imposed, for each of them, an overhead light direction aimed at. In the production of each serration flute 400, a maximum height of the protuberance created by the serration flute is also imposed; depending on the embodiment, this height can vary between 0.2 millimeters and 3 millimeters. With such constraints, when a starting point of the serration flute is chosen on the exit surface of the lens, the form of the serration flute is serration flute is no longer free but is the result of the resolution of a differential equation which imposes the position of each of the points on the line constituting this serration flute so that the latter has an exit surface such that the light rays passing through it are oriented towards the overhead light aimed at.

Please replace the paragraph beginning at page 12, line 6, with the following rewritten paragraph:

-- The form of each serration <u>flute</u> 400 is therefore not a parameter available to the manufacturer but is imposed by the intention to divert the light rays solely towards the overhead lights whilst maintaining a substantially constant serration <u>flute</u> thickness. –

Please replace the paragraph beginning at page 12, line 11, with the following rewritten paragraph:

-- As stated, each serration <u>flute</u> is intended to illuminate a particular overhead light. However, several distinct serrations <u>flutes</u> with distinct starting points on the exit face of the lens can serve to illuminate the same overhead light. Such a way of proceeding has several advantages: first of all, for a person situated in a direction corresponding to that aimed at in order to reach the overhead light, if only one serration <u>flute</u> is used to illuminate the overhead light in question, this person will perceive solely a very bright spot, which may be disagreeable. By multiplying the serrations <u>flutes</u> for the same overhead light, the bright spots are multiplied whilst limiting the light intensity thereof. Next, multiplying the serrations <u>flutes</u> for the same overhead light limits the length and width of each serration <u>flute</u> concerned, and thus limits the quantity of energy taken off in the same area of the light beam 200, and thus to limit the line constituting the serration <u>flute</u> to the side surfaces 306 and 307. However, in some embodiments, at least one serration <u>flute</u> may be slightly extended towards the central part of the lens. --

Please replace the paragraph beginning at page 12, line 30, with the following rewritten paragraph:

-- In one example embodiment, the serrations <u>flutes</u> do not stop on arcs, that is to say, for each side of the lens – left-hand side or right-hand side – the points constituting all the terminations of the various <u>serrations flutes</u>, a termination point being the point on the <u>serration flute</u> closest to the center of the lens, are disposed not in an arc of a circle but in a straight line when looking at the lens in front view. –

Please replace the paragraph beginning at page 13, line 7, with the following rewritten paragraph:

-- In the example proposed in FIG. 4, a lens 401 is shown having twelve distinct serrations flutes 400; these serrations flutes correspond in practice to four groups of three serrations flutes, each group of serrations flutes being intended to emit light rays in a direction corresponding to a single overhead light. The serrations flutes 400 are disposed symmetrically with respect to the vertical axis 301 of the lens. –

Please replace the paragraph beginning at page 13, line 14, with the following rewritten paragraph:

-- For reasons of simplification of the production of the mold in which the lenses 401 are manufactured, it is preferable to take as the starting point of a serration <u>flute</u> a point situated on the periphery of the lens 401, or close to this periphery, that is to say at less than 1 centimeter from the periphery. --

Please replace the paragraph beginning at page 13, line 19, with the following rewritten paragraph:

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-- Finally, it should be stated that the calculations leading to the forms of the various serrations flutes are made rigorously for a light ray emitted from the focus of the projection lens. The spread of the light source at the first focus F1 of the reflector 101, in particular because of the presence of a filament, provides a spread of the light rays diverted by the serrations flutes around the overhead lights, thus creating a slight light halo around the overhead lights aimed at sufficient to give the impression of slight homogeneous illumination in an area containing the overhead lights. Consequently it may be sufficient to provide only two distinct arrangements on the surface of the lens and to make calculations so that each arrangement diverts light rays, emitted by a notional point source disposed at the focus F2, to a point situated approximately at the center of two overhead lights, for example the two overhead lights situated on the same side of the vertical axis 202. The halo formed around the two points aimed at can satisfactorily illuminate all the overhead lights. --